

5

10

15

What is claimed is:

20

1. A substrate bonding apparatus for manufacturing an LCD device comprising:
a base frame forming the exterior;
upper and lower chamber units mounted on the base frame for being coupled
with each other;
upper and lower stages in the interior spaces of the respective upper and lower

chamber units for affixing one pair of substrates; and

a plurality of elastic members between the chamber unit and the stage, for being pressed to a direction at which the chamber units are bent.

5 2. The substrate bonding apparatus according to claim 1, wherein the respective elastic members are formed of a coil spring to provide a restoring force in opposite to the bent direction of the chamber units.

10 3. The substrate bonding apparatus according to claim 1, wherein the respective elastic members are formed of an initially coned disk spring to provide a restoring force in opposite to the bent direction of the chamber units.

15 4. The substrate bonding apparatus according to claim 1, wherein the first elastic member includes a plate spring to provide a restoring force in opposite to the bent direction of the chamber units.

20 5. The substrate bonding apparatus according to claim 1, wherein the respective stages include an affixing plate affixed to the chamber unit and an adsorbing plate to which the substrate is affixed, and each elastic member have both ends fixed between the adsorbing plate and the affixing plate.

6. The substrate bonding apparatus according to claim 5, wherein each elastic member is additionally provided between each chamber unit and each affixing plate for forming each stage.

7. The substrate bonding apparatus according to claim 5, wherein the adsorbing plate includes a plurality of electrostatic chucks.

5 8. The substrate bonding apparatus of claim 5 or 7, wherein the elastic members are provided for being corresponding to the plurality of electrostatic chucks.

9. The substrate bonding apparatus of claim 5, wherein the respective adsorbing plates are formed of a SUS material, or an aluminum alloy material.

10

10. The substrate bonding apparatus of claim 5, wherein the respective adsorbing plates are formed at a thickness of 40mm or more.